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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,472

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Florian Lunzer

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11/17/2009

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EXAMINER

LIGHTFOOT, ELENA TSOY

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

11/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,472	LUNZER ET AL.	
	Examiner	Art Unit	
	Elena Tsoy Lightfoot	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Response to Amendment

Amendment filed on September 1, 2009 has been entered. Claim 2 has been cancelled. Claims 1, and 3-10 are pending in the application. Claims 6-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims examined on the merits are 1, and 3-5.

Claim Objections

1. Claims 1, and 3-5 are objected to because of the following informalities: it is advised to change “polyester_urethane” to more conventional spelling “polyester urethane”. Note that the Abstract spells resin as “polyester urethane”. Appropriate correction is required.
2. Claim 1 is objected to because of the following informalities: it is advised to change “...hydroxyl groups, C wherein” to “...hydroxyl groups C, wherein”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Rejection of claims 1 and 4-5 under 35 U.S.C. 102(b) as being anticipated by Blum et al (US 6,541,535) has been withdrawn due to amendment.

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5. Claims 1, and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al '535 for the reasons of record set forth in paragraphs 5-6 of the Office Action mailed on 5/21/2009 because limitations of claims 2 and 4 are incorporated now into claim 1.

As to concentration limitations of claims 1 and 4, it is held that concentration limitations are obvious absent a showing of criticality. *Akzo v. E.I. du Pont de Nemours* 1 USPQ 2d 1704 (Fed. Cir. 1987). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant concentration parameters (including those of claimed invention) in Blum et al depending on particular use of a final product through routine experimentation in the absence of showing of criticality.

Response to Arguments

Applicant's arguments filed September 1, 2009 have been fully considered but they are not persuasive.

(A) Applicants argue that Blum is based on the priority application DE 198 35 849 A1 which has been discussed in the introductory portion of the present specification. The resins described therein are used for powder coating applications. These resins even if diluted with reactive diluents cannot be used for application from solution because of their high viscosity, and the propensity to embrittlement if the amount of reactive diluent is raised so as to bring the viscosity down to a tolerable level for solution application. It has been found that addition of fatty acids having from 6 to 30 carbon atoms and which may optionally be unsaturated, in a mass fraction of from 15 % to 60 % in the condensation mixture for preparation of the polyester A, leads to polyester urethane resins which have the desired lower viscosity.

The argument is unconvincing because claims *neither* recite that resins ABC are diluted with a solvent, *nor* recite a negative limitation that the resins ABC are not powder coating compositions. Thus, discussion of "low viscosity" is irrelevant.

(B) Applicants submit that the problem to be solved in their invention was to provide a radiation curable coating composition that can be applied in the liquid state, by spraying, or rolling, to the surface of a substrate. This problem was solved by adding to the reaction mixture for condensation polymerization to build the polyester A, this claimed range of mass fractions of

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fatty acids A4, and by using a combination of dihydric aliphatic alcohols A1 and trihydric or more than trihydric aliphatic alcohols A2. Unexpectedly, it has also been found that this choice does not only lead to the desired range of viscosity which allows application from the liquid state, in contrast to application as a powder as taught by Blum, but also the adhesion to metal substrates was found to be markedly improved. See the third paragraph on page 1 of the specification, starting with "In the experiments ...". This improved adhesion was shown in the examples, where the so-called T- bend according to ASTM D 4145 was determined. The most demanding test is the TO test where a strip of metal was bent by 180°, the metal layers lying directly on one another, and the metal strip coated with the coating composition according to the invention showed no cracks and no loss of adhesion there. This could not have been expected by a person skilled in the art, judging from Blum. There is no teaching, suggestion or motivation in Blum to modify the composition of the polyester accordingly, and thereby obtain a binder with the properties as shown.

The Examiner respectfully disagrees with this argument for the following reasons:

- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **viscosity** that allows the composition to be applied in the liquid state, **by spraying, or rolling**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- The third paragraph on page 1 of the specification, starting with "In the experiments ..." discloses that so called "critical" fatty acids are **optional**.
- Applicants' assertion of criticality of claimed range of mass fractions of fatty acids is a pure allegation. The specification provides NO *experimental* data showing criticality of **claimed range** of mass fractions of fatty acids, thereby supporting the allegation.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy Lightfoot whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Lightfoot, Ph.D.
Primary Examiner
Art Unit 1792

November 17, 2009

/Elena Tsoy Lightfoot/